

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of January 7, 1960 Regular Meeting

The regular meeting of the Milwaukee Radio Amateurs' Club convened in the Lutheran Center at 8:15 P.M. with President Ken Eggert, W9MOT, presiding.

Minutes of two previous meetings were read and approved.

A Treasurer's Report was presented.

Jack Kunath, W9OMY, reported on current DX activity.

Doug Pavak, W9FDX, issued an invitation for club members to attend an AIEE discussion group meeting at the Square D, Good Hope Road plant on January 13. Topic will be Static Control.

Vice-President, Russ Burss, W9RKP, introduced new member Gary Steele, ✓
KN9RZB.

Mobile ham assistance is needed for a March of Dimes Telethon on January 16 and 17. Wally Glich, W9YYW, and Don Gross, W9KQD, will endeavor to round up some volunteers for this cause.

Fred Borchardt, W9DYG, announced that the date of the Wausau Hamfest has been changed to May 21, 1960.

The remainder of the meeting was devoted to a rollcall of those present. Vice-President Ink Bowen, W9QYW, called on each person to identify himself, describe his rig, state his opinion on whether extra privileges should be granted to Amateur Extra Class Licenses and indicate his favorite mode of operation.

Meeting adjourned at 10:20 P.M. with 33 members and 6 guests in attendance.

Respectfully submitted

C.C.Porch, K9ENB
Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of January 14, 1960 Regular Meeting

The regular meeting of the Milwaukee Radio Amateurs' Club convened in the Lutheran Center at 8:25 P.M. with President, Ken Eggert, W9MOT, presiding.

Minutes of the previous meeting were read and approved.

President Ken Eggert, W9MOT, introduced new member, John Cyarnecki, ✓
K9PSU.

A film, produced by General Electric, entitled "Basic Electricity" was presented.

Emil Felber, W9RH, played a tape recording of a "Voice of America" ham broadcast and also a tape of a broadcast station treatment of a TVI hearing which occurred in Milwaukee several years ago.

Meeting adjourned at 10:00 P.M. with 23 members and 2 guests in attendance.

Refreshments were served after the meeting.

Respectfully submitted

C. C. Porch, K9ENB
Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of January 21, 1960 Regular Meeting

The regular meeting of the Milwaukee Radio Amateurs' Club convened in the Lutheran Center at 8:15 P.M. with First Vice-President, Ink Bowen, W9QYW, presiding.

Minutes of the previous meeting were read and approved.

W9YYW gave a report on the mobile activities in the recent WISN-TV "March of Dimes" Telethon.

W9OMY and W9LVS gave a report on current DX activities.

Jack Doyle, W9GPI, announced that a Central Division Convention is scheduled in Indianapolis in September, 1960.

Our principal speaker, Bud Drobish, W9QVA, of Hallicrafters displayed some new Hallicrafters gear-namely the HT-37, SX-111 and the TO Electric Keyer. Bud presented slides taken during Operation Worldwide in 1959 when Bud had the opportunity to test some new gear in an around the world flight.

Meeting adjourned at 10:30 P.M. after which the gang retired to Amateur Electric Supply for copious refreshments and a chance to examine the new gear in better detail. All of this courtesy of Terry W9DIA, and Steve W9EAN.

Attendance at the meeting was 48 members and 13 guests.

Respectfully submitted

C.C.Porch, K9ENB
Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of February 4, 1960 Regular Meeting

The regular meeting of the Milwaukee Radio Amateurs' Club convened in the Lutheran Center at 8:25 P.M. with President Ken Eggert, W9MOT, presiding.

Minutes of the previous meeting were read and approved and a Treasurer's report was presented.

Doug Pavsek, W9FDX, announced a local ten meter phone contest for February 10, 1960.

Russ Burss, W9RKP, introduced new member Ronald W. Hooker, KL7CUW/9.

Jack Kunath, W9OMY, presented a DX committee report.

First Vice-President, Ink Bowen, W9QYW, presented the principal speaker for the evening, John Magnusson, WQAGD, of the E.F. Johnson Co. who spent the rest of the evening in an informative technical session covering such things as break-in, antenna couplers, keying and flexible operating arrangements.

Meeting adjourned at 10:30 P.M. with 44 members and 9 guests present.

Respectfully submitted

C.C. Porch, K9ENB
Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of February 18, 1960 Regular Meeting

The meeting convened in the Lutheran Center at 8:20 P.M. with President Ken Eggert presiding.

Minutes of the previous meeting were read and approved.

Dick Oberholtzer, W9ZPV, presented the evenings program, beginning with a movie, When Every Minute Counts. This is a film made by the philmont Radio Club covering amateur radio emergency communications. This was followed by a film, The Invisible Enemy, which describes the hazards and precaution to be taken in the event of an atomic explosion. Dick concluded his program with a description of a proposed group of emergency nets he wishes to establish in the Milwaukee area, and a plea for participation by club members.

The meeting adjourned at 10:00 P.M.

Refreshments were served after the meeting.

Respectfully submitted

Jim Buth, K9CJK

Acting Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of March 3, 1960 Regular Meeting.

The meeting convened in the Lutheran Center at 8:30 P.M. with President Ken Eggert presiding.

Minutes of the previous meeting were read and approved.

Doug Pavsek, W9FDX, Chairman of the local contest committee reported on the 10 meter phone contest held Feb. 10, 1960, and announced the following results:

1st Place Mobile:	Don Gross W9KQD/M
2nd Place Novice &SWL:	Erich Ziemann KN9TTQ
1st Place fixed:	Doug Pavsek W9FDX
2nd Place fixed:	Russ Greenwood W9LVR
3rd Place fixed:	(John Halser K9MTM
	(Jim Buth K9CJK

Doug reported this contest had the most activity of any local contest held, with approximately 50 stations participating.

Charlie Dawson, W9CUW, and Jack Doyle, W9GPI, who attended a meeting of the Wis. Council of Radio Clubs at Fond Du Lac on Feb. 25, 1960, discussed some of the highlights of the meeting and announced some of the groups future plans.

Jack also reported on the allocation of the top 50 KC of the 20 meter band, which will be opened up to U.S. Amateurs on midnite of Mar. 9, 1960.

Ken introduced Russ Burss, W9RKP, who presented the program for the evening. The first part of the program dealt with duties of an official observer. Russ explained the qualifications for the different classes of official observers, and listed the services they perform. The need for many more official observers was stressed by Russ.

The program was concluded with a live demonstration in frequency measuring. With the use of his equipment and help of Ink Bowen, W9QYW, Russ demonstrated how to measure the frequency of an unknown signal, and determine its exact frequency within a few cycles. A question and answer period followed his talk.

The meeting adjourned at 10:20 P.M.

Refreshments were served after the meeting.

Respectfully submitted

Jim Buth, K9CJK

Acting Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of March 10, 1960 Regular Meeting.

The meeting convened in the Lutheran Center at 8:25 P.M. with President, Ken Eggert, presiding.

Minutes of the previous meeting were read and approved.

Minutes of the Board of Directors Meeting of January 28, 1960 were also read.

Sy Sysocki W9DOS reported that club member, Bernie Philippsen W9CRG, had received assistance from members of the West Allis Radio Club and was now back on the air.

A DX report was given by Jack Kunath, W9OMY, with additional information submitted by John Scarvaci W9GIL.

President Ken Eggert gave a brief summary of last years achievement award and asked for more participation in this year's competition.

A communication from ARRL headquarters regarding citizen band operation was read by Ken.

Local contest chairman, Doug Pavak, W9FDX, presented Fred Borchardt, W9DYG, a trophy for his participation in the 10 meter phone contest held Feb. 10, 1960. Doug announced the next contest will be held Wednesday night, April 6, 1960 with the mode of emission to be CW only.

Ken announced the programs scheduled for future meetings, with next Thursday night, March 17th. to be Collins Radio Nite.

The meeting was turned over to Doug Pavak, W9FDX, who presented the evening program. Doug explained the purpose of the MRAC Slide Library and how it was possible for other members to have their slides added to the collection.

The showing of the slides followed Doug's talk. The slides included shots of club members, their equipment, and club activities. A brief description of each slide was given with additional comments voiced by club members.

The meeting adjourned at 9:55 P.M.

Respectfully submitted

Jim Buth K9CJK

Acting Sec'y.

MILWAUKEE RADIO AMATEURS' CLUB, INC.

Minutes of March 17, 1960 Regular Meeting

The meeting convened in the Lutheran Center at 8:15 P.M. with President Ken Eggert, W9MOT, presiding.

Minutes of the previous meeting were read and approved.

Three official bulletins from ARRL were read by Ken.

The membership was reminded of the MRAC Contest Award and asked to show more interest in this award.

Following an announcement of future programs by Ken the program for the evening was presented.

The first part of the program consisted of a color movie from General Electric entitled "The Teacher Wore White". The film dealt with the design, manufacture and testing of electronic tubes.

Following the film Doug Pavsek, W9FDX, introduced Jim Taylor, K4SGY, of the Collins Radio Co. Jim gave an excellent talk on single side band simplified. With the aid of the blackboard he listed some facts and figures, comparing SSB to AM, and told why he thought some day SSB would replace AM. A question and answer period followed his talk.

The meeting was adjourned at 10:25 P.M.

Refreshments were served following the meeting.

Respectfully submitted

Jim Buth, K9CJK

Acting Sec'y.

MRAC DX NITE APRIL 7, 1960

PRESENTED BY

MEMBERS OF THE MRAC DX COMMITTEE

- | | |
|-------------------------------------|------------------------|
| 1. Introduction | Jim Burth - K9CJK |
| 2. DX, What it is, history of, etc. | Ink Bowen - W9QYW |
| 3. CW DX | Fred Borchardt - W9DYG |
| 4. Phone DX | Bill Brosnan - W9EQP |
| 5. SSB DX | Pat Shanahan - W9UNJ |
| 6. Mobile DX | Fred Zolin - W9ONY |
| 7. DX'Peditious | Doug Pavak - W9FDX |
| 8. DX Contests & Others | Don Gross - W9KED |
| 9. XYL & DX | Jeanne Pavak - W9ONZ |
| 10. Certificates & Awards | John Scervaci - W9GEL |
| 11. Bulletins & Publications | Jack Kunath - W9OMY |
| 12. QSL Bureaus & Cards | Russ Bures - W9RKP |
| 13. Antennas for DX | Russ Greenwood - W9LVR |
| 14. Operating Ethics | Charlie Forch - K9ENB |
| 15. MRAC DX Check Sheet | Ray Peschek - W9LJU |
| 16. ARRL & QSL Cards | Jack Doyle - W9GPI |
| 17. Question & Answer Period | |

QSL displays by all persons listed above and K9CAN, W9RH, W9YZG, W9CAS, K9TUF.

REGULAR MEETING
Thursday, April 7, 1960

The regular meeting of the Milwaukee Radio Amateurs' Club convened in the Lutheran Center at 8:25 P.M. with President Ken Eggert, W9MOT, presiding.

Minutes of the previous meeting were read and approved. In addition the Secretary read two ARRL Official Broadcast Station bulletins.

President Ken Eggert sadly announced the death of MRAC Old Timer, George C. Bowen, W9DWI. Emil Felber, W9RH, gave a resume of George's very active participation in Club activities through the years. At various times he has served as President, Vice President, Treasurer and Director. The membership present observed three minutes silence as a tribute to W9DWI.

President Ken Eggert reminded the membership again of the new "Annual Contest Cup Award." Due to the poor response the final date for submitting an entry for this award has been deferred to April 21, 1960.

Minutes of the February Board meeting were read.

Jim Buth, K9CJK, Chairman of the DX Committee, presided for the main program, the annual DX program, presented by the members of the DX Committee. Participating in the program and exhibits were K9CJK, W9DYG, W9ONY, W9FDX, W9KQD, W9OMZ, W9GIL, W9RKP, W9LVR, K9ENB, W9LJU and W9RH.

The meeting adjourned at 10:10 P.M. with 26 members and 4 guests present. Refreshments were served after the meeting.

Respectfully submitted

Charles Porch, K9ENB
Secretary

Regular Meeting
Thursday April 14, 1960

The regular meeting of the Milwaukee Radio Amateurs' Club convened in the Lutheran Center at 8:30 P.M. with President Ken Eggert W9170T presiding. Minutes of the previous meeting were read and approved with corrections.

The president again reminded the members of the Annual Contest Cup Award, and asked that more interest be shown in this event.

Future meeting notices were read by Ken, with special attention given to program revisions.

The membership was informed that the Wisconsin Hamfest sponsored by the Wisconsin Valley Radio Assoc. Inc. will be held May 21, 1960 at St. Theresa's School, Schofield, Wis. Cost of tickets to be \$3.75 per plate.

Fred Barchett W9DY6 presented a report from Dick Oberholtzer W9ZPY on a building in which future club meetings could be held. Additional information regarding this building was submitted by Travis Baird W9VQD.

Ken announced a civil defense emergency test will be held next month May 3-4-5.

Jack Doyle W9GP1 read a letter from club member Frank Miorona W9TPT who now resides in Mesa Ariz. The letter told of Franks most recent activities and business ventures.

Jack also reported on some of the highlights of the IRE show held in New York, and discussed current activities of ARRL in Hartford.

The meeting was turned over to Ink Bowen W9QYU who presided over the evenings program. The purpose of the program was to find out if possible, why club members did not attend regular club meetings.

Members in attendance took part in a discussion regarding this problem, and stated their reasons for lack of attendance by club members. The possible causes for lack of attendance were recorded on paper, and will be used in the near future to poll the entire membership. - get a cross section of opinions and possible solutions.

The meeting adjourned at 10:35 P.M.

Respectfully submitted
Jim Ruth K9CJK

MILWAUKEE RADIO AMATEUR'S CLUB INC.
Regular Meeting
Thursday April 28, 1960

The regular meeting of the Milwaukee Radio Amateur's Club convened in the Lutheran Center at 8:15 P.M. with 2nd Vice President Russ Burss W9RKP presiding in the absence of President Ken Eggert W9MOT.

Minutes of the previous meeting were read and approved.

A financial report was read by Treasurer Don Gross W9KQD.

A notice of the Wausau Hamfest to be held May 21, 1960 was read by W9RKP. Tickets for this event may be purchased from Ken Eggert W9MOT.

W9RKP read a list programs scheduled for the balance of the year, and also reminded the membership of the annual ARRL Field Day Contest to be held June 25-26.

A report on current DX activities and band conditions was given by K9CJK and W9RKP.

An announcement of the Dayton Hamvention to be held May 7, 1960 at Dayton, Ohio, and other correspondence was read by W9RKP.

The meeting was turned over to Fred Borchardt W9DYG who with the help of Dennis Wroblewski K9DTK presented the evenings program, Traffic Nite.

Fred and Dennis explained the National Traffic System, why it was organized and its operation.

Different types of traffic, the proper handling of messages, and correct message forms were also explained. With the use of diagrams Fred showed how messages were passed from one net to another. Tape recordings of actual nets in operation were also played. In attendance were traffic men Pud Woida W9KQB, and Ralph Klien W9DKH of Manitowoc, Ralph Potter W9VHP and his XYL Sarra W9VIK of Fond du Lac.

To conclude the program Wisconsin's SCM Bud Boida W9KQB commended club members Fred Borchardt W9DYG for his work in the traffic, also Russ Burss W9RKP, and Dick Regent K9GDF for their work as official observers.

The meeting adjourned at 10:25 P.M.

Respectfully submitted,
Jim Buth K9CJK

Report of Nominating Committee May 5, 1960

President	{Orlan (Ink) L Bowen W9QYW
1st Vice Pres.	Russell Burs W9RKP
2nd Vice Pres.	Eugene Strzyzewski W9ZAN
Secretary	Russell Greenwood W9LVR
Treasurer	Erwin Reiser K9CUI

Board of Directors

John Halser	K9MTM
William Grossman	W9EQP
Fred Borchardt	W9DYG
Walter Loring	W9KVX
Jack Kunath	W9OMY
John Hughes	W9ULA
Russell Burs	W9RKP

Nominating Committee

Travis David	chairman W9VRD
Fred Golub	W9ONY
James Butth	K9GJK
Si Wysocki	W9DOS

Milwaukee Radio Amateurs Club, Inc.
Regular Meeting
May 26, 1960

The regular meeting of the Milwaukee Radio Amateurs Club convened in the Lutheran Center at 8:30 P.M. with President Ken Eggert, W9MOT, presiding.

Minutes of the previous meeting were read and approved.

The president reported on the Wausau Hamfest held May 21, 1960

Jack Doyle, W9GPI, reported on the Wisconsin Council of Radio Clubs, describing its operation and future plans.

Treasurer Don Gross, W9KQD, presented his annual financial report.

Jack Doyle, W9GPI, presented the newly elected officers who were later installed.

Newly elected president Ink Bowen, W9QYW, presented Doug Pavsek, W9FDX, who announced winners of the Wisconsin State QSO party and presented the Novice Cup to Gary Steele, KN9RZB.

The speaker for the evening was Charles Dawson, W9CUW, who gave a lecture and demonstration of teletype printers. It was demonstrated that teletype reception can be solid through QRM by superimposing voice and code interference on the tape used to drive the printer. Herbert Zgarra, W9MQA, reported that teletype machines could be obtained from the Bell System if they are used for purposes that are non-competitive to the Bell System.

The meeting adjourned at 10:15 P.M.

Respectfully submitted,
R. Greenwood, W9LVR, Secy.

Report of Net Class V for 1959-1960 Club year

I Program - Through the cooperation of Central Wisconsin Director Jack Doyle, W9GPT and the members of the Board of Directors, the club was ~~able to~~ ^{permitted} to have an guest, ~~speakers from~~ ^{mainly} the following the fellow speakers:

A Paul Drobach, W9GHA Hall Chapter

B John Magnusson, W9AOB & T. Johnson Co.

C Jim Taylor, K9SER - Collins Radio Co

~~and~~ a movie entitled "The Teacher Were White" thru the courtesy of Central Electric and so Wireless W9VCS, and a slide/tape recorded program "The Story of DX" courtesy of ARRL and Charlie Forch, K9ENB

Members who presented programs included W9HUX

"Slide Night", W9HUX, "Fugaming Wiggles", W9VCH

"Mobile Equipment", Andy Stromgren "A tour of the Far East",

"DX Mile" & the DX and Detention Committee, ~~and~~ Luffe

into ~~by~~ ^{by} ~~W9HUX~~ W9HUX and K9DIX, and "The

Immortal Evening" by W9HUX. If I have failed to

define words anyone, I apologize, for keeping such

poor records. My deepest appreciation to all of

those who helped in any way.

Code Class

II Early in the 1959-1960 club season, Central Wisconsin Director W9GPT urged the Board of Directors

to start an experimental type class in the fundamentals of amateur radio. W9QYU and K9ENB volunteered to start the program in October, for 1 hour - given to each club meeting. After some hesitancy by the club members, Jack Dye, W9GPI and others, the class began on Oct 7, 1959 with 24 interested persons (and potential new members) attending. While initial enthusiasm was high, the attendance dropped off until on Feb 4, there were only 4 in regular attendance. Unfortunately, W9QYU and K9ENB both were unable to continue with the teaching of this course because of a conflict with a business course which both were taking. It is regretted that the course could not be continued to its intended conclusion.

III. Observations -

I. The Lake and Sherry Clubs are to be commended to the new board of directors. As being so enthusiastic about the project hopefully, they will attempt to continue at next year.

II. Since attendance is generally directly proportional to the program material, and program material is the responsibility of the last three years, it was felt by the program chairman that attendance was, if anything, below average.

Attendance at program featuring introduction
arranged about 50. For local presentation by
club members attendance arranged about 30-35. It
is a bit discouraging to open program devoted to have
provided these programs and then have so many
empty seats. It appears that a large portion of
the membership is not directly interested in what the
club is doing. An examination of the attendance
charts shows the same persons coming to every
meeting. It is hoped that the new club officers
will be able to find a solution to this dilemma.
Some things started next year, we have programs for
programs from the Ham antenna Products Co, and
the RME Division of Elliott's Voice to the
Ham Programs Chairman. Good Luck.

Alvin W. G. T. U.
5/12/61

Regular Meeting
Thursday May 19, 1960

The regular meeting of the Milwaukee Radio Amateur Club convened in the Lutheran Center at 8:25 P.M. with president Ken Eggert W9MOT presiding.

Minutes of the previous meeting were read and approved. In addition an official bulletin no. 753 from ARRL headquarters was read by the secretary.

A DX report was presented by Jack Kunath W9OMY. 1st Vice President Don Bower W9QYW and 2nd Vice President Russ Buras W9RKP presented their annual reports for the 1959-60 club season.

Treasurer Don Gross W9KQD read a financial report for the month of April 1960.

New member Samuel Saffro K9OHX was interrogated by memberships chairman Russ Buras W9RKP.

The president presented the candidates for this years election and gave a brief explanation of the election procedure. Ballots were passed out to all eligible voting members and the voting began, during which time auctioneers Doug Pavlek W9FDX and Travis Baird W9VQD proceeded with the evenings auction.

Following the auction Emil Feller W9RHH of the election committee read the results of the election which were as follows:

For President: Ink Bowen W9QYW 36 votes
Russ Burr W9RKP 21 "

Candidates for the following offices were unopposed.

1ST Vice President: Eugene Strzyzewski W9ZAN

2ND Vice President: Don Gross W9KQD

Secretary: Russell Greenwood W9LVR

Treasurer: Erwin Reiser K9CVI

For the office of Board of Director 3 to be elected.

Fred Borchardt W9PYG 41 Votes

John Hughes W9ULA 30 "

John Halser K9MTM 28 "

Jack Kunath W9OMY 24 "

Frank Seloth W9NLY 17 "

Walter Laing W9KVX 16 "

William Brassman W9EQP 13 "

The meeting adjourned at 10:17 PM with 58 members and 10 guest present. Refreshments were served following the meeting.

Respectfully submitted
Jim Baith K9CTX

Regular Meeting
Thursday May 5, 1960

The regular meeting of the Milwaukee Radio Amateurs Club convened in the Lutheran Center at 8:30 P.M. with president Ken Eggert W9MOT presiding. Minutes of the previous meeting were read and approved.

Several pieces of correspondence was read by W9MOT, which included a notice from the Starved Rock Radio Club of Ottawa, Ill. announcing their annual hamfest will be held June 5, 1960.

1st Vice president Lark Bowen W9QYW reported on future programs which are scheduled for the balance of the club season.

A financial report for the month of April was read by Treasurer Don Gross W9KQD.

Minutes of the Board of Directors meeting held March 25, 1960 were read by the secretary.

Dick Oberholtzer W9ZPV presented a report on the recently held Civil Defense Alert Test held May 3-4-5. Some of the groups future plans were also discussed.

Russ Burrus W9RKP announced the results of the 959 Helveta Contest, and displayed a certificate he had received for placing 35th in this event.

Local contest chairman Doug Pavlek W9FOX awarded the trophy and certificates for the local ten meter CW contest.

NEXT PAGE

Held April 6, 1960 the winners were as follows:

2ND place mobile Fred Zolin W9ONY

1ST place mobile Don Gross W9KQD

3RD place fixed Dick Regent K9GDF

Tied { 2ND place fixed Russ Buss W9RKP

{ 2ND place fixed Russ Greenwood W9LVR

Tied { 1ST place fixed Link Bowen W9QYW

{ 1ST place fixed Doug Pavak W9FOX

Chairman of this years nominating committee Travis Baird W9VQD reported the following club members had consented to run for office in the coming election.

For president: Link Bowen W9QYW, and Russ Buss W9RKP.

1st vice pres: Eugene Strzyzewski W9ZAN

2ND vice pres: Don Gross W9KQD

Secretary: Russell Greenwood W9LVR

Treasurer: Erwin Reiser K9CUI

Board of directors: John Haker K9MTM, William Broseman W9PES, Fred Borchardt W9DYG, Walter Laing W9KVK, Jack Kunath W9OMY, and John Hughes W9ULA.

The meeting was turned over to program chairman Link Bowen W9QYW, who after a brief explanation presented the evenings program "The Story of DX". This consisted of a large number of slides and a tape recording, showing and describing DX men and their equipment in the early days of amateur radio. As the story went on it showed the progress that was made throughout the years, and ended by showing some of the present day top DX men and their equipment. The meeting adjourned at 10:55.

Respectfully submitted - Jim Butth K9CIK